

09

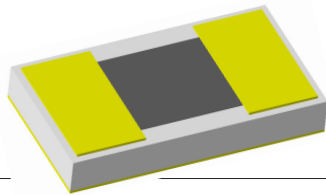
FR
Thin-film Resistor

Type: FR

FR
Thin-film Resistor

1 Features

- 1) Small size, high frequency;
- 2) TaN thin-film resistor , stable performance;
- 3) Gold Electrode is applicable to micro-assembly process such as gold wire or gold strip bonding.



2 Applications

D.C bias in radio frequency and micro-wave circuits.

3 How to order

FR		A		2A		500		K		T		B		C		
Type	Electrode Style	Case size		Dielectrics		Rated power		Nominal Resistance		Resistance Tolerance		Electrode Materials		Gold Thickness		Packing
①	②	③		④		⑤		⑥		⑦		⑧		⑨		⑩
① Type				② Electrode Style				Drawing								
FR: Thin-film Resistor				A: Double-sided Electrode B: Single-sided Electrode												
③ Case size (mm)																
Case size		0101		0201		0202		0402		0603						
L		0.25 ± 0.076		0.50 ± 0.076		0.5 ± 0.076		1.0 ± 0.076		1.6 ± 0.076						
W		0.25 ± 0.076		0.25 ± 0.076		0.5 ± 0.076		0.5 ± 0.076		0.8 ± 0.076						
T		0.254 ± 0.076														
④ Dielectrics				⑤ Rated Power		⑥ Nominal Resistance						⑦ Resistance Tolerance				
A	99.6% AlO		2A		0.1W		EIA Capacitance code in pF.1st two digit are significant figures of capacitance; 3rd digit denotes number of Zeros; R=decimal point; For examples: 2R5=2.5Ω.						K	± 10%		
N	99% AlN												M	± 20%		
⑧ Electrode Materials				⑨ Gold thickness								⑩ Packing				
P: TiW/Au T: TiW/Ni/Au Excluding resistance film (TaN)				If gold thicknesses of upper and lower sides are the same, gold thickness: 1:≥ 1.3μm; 2 or blank:≥ 2.5μm; 3:≥ 3.8μm5: ≥ 5μm				If gold thicknesses of upper and lower sides are difference, upper gold thickness: A: ≥ 1.3μm C: ≥ 3.8μm B: ≥ 2.5μm D: ≥ 5μm				C	Waffle			
												F	Film			

4 Nominal Resistance Range

Type	Case size	Resistance Range	Rated Power
FR	0101	10Ω~100Ω	0.1W@70℃
	0201	10Ω~200Ω	
	0202	10Ω~200Ω	
	0402	10Ω~500Ω	
	0603	10Ω~500Ω	

FR

Thin-film Resistor

5

Storage

Capacitors must be stored in the warehouse with the ambient temperature From -10°C to 40°C, relative humidity below 80%, and free of acid, alkaline or detrimental gas.
Capacitors must be in vacuum packing or in the protection of Nitrogen after unpacking.
The max. storage period is 18 months.